



저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

Master's Thesis

**A Study on the Exclusion
of the Older People
in International Humanitarian Aid:**

**Focusing on the Case Study of Ethiopia and
Indonesia after Implementing the Sendai Framework**

인도적 지원에서의 노인 소외 현상 연구:

센다이 프레임워크 도입 이후

에티오피아와 인도네시아의 사례를 중심으로

August 2019

Graduate School of International Studies

Seoul National University

International Cooperation Major

Yun Su Cha

**A Study on the Exclusion of the Older People
in International Humanitarian Aid:
Focusing on the Case Study of Ethiopia and
Indonesia after Implementing the Sendai Framework**
Professor Taekyoon Kim

Submitting a Master's Thesis of International Studies

August 2019

**Graduate School of International Studies
Seoul National University
International Cooperation Major**

Yun Su Cha

Confirming the master's thesis written by

Yun Su Cha

August 2019

Chair Chong-Sup Kim (Seal)

Vice Chair Oung Byun (Seal)

Examiner Taekyoon Kim (Seal)



© Copyright by Yun Su Cha 2019

All Rights Reserved

Abstract

A Study on the Exclusion of the Older People in International Humanitarian Aid: Focusing on the Case Study of Ethiopia and Indonesia after Implementing the Sendai Framework

Yun Su Cha

International Cooperation

Graduate School of International Studies

Seoul National University

Globally, the population is aging rapidly, and at the same time, the intensity and frequency of natural disasters are increasing because of the climate change. Thus, when natural disasters such as volcanoes, earthquakes, droughts, floods and tsunamis occur, the older people have been recognized as an important group in terms of their proportion in population and vulnerability. This study, however, confirmed that the older people are not adequately supported in disaster situations, and their rights are not protected, unlike children and women. The core value of humanitarian aid is humanity

and impartiality. Everyone has equal rights to be protected and get support. Nevertheless, the older people, identified as one of the vulnerable groups, could not access to enough and proper assistance.

This study specifically analyzed Ethiopia's 2017 drought and Indonesia's 2018 tsunami based on the Sendai Framework's Four Priorities for Action to identify the situation of the exclusion of older people in humanitarian aid. Interestingly, even though both countries have established disaster risk management platforms in their government and have a disaster-related database, there are almost no official and detailed data on the extent and effectiveness of aid for the older people when international humanitarian aid was provided. This is contrast to the fact that data on children and women have been identified, classified by relief projects, population and so on. To analyze the scope and effectiveness of humanitarian aid for the older people, data from Helpage's Rapid Needs Assessment of Older People were reviewed. In conclusion, regardless of the economic development of the country, health, lifesaving and even rights of the older people are not properly guaranteed.

This research is meaningful, because only small number of studies have researched on the support and protection of the elderly after introducing and implementing the Sendai Framework. To prepare for the aging population globally and effectively respond for natural disasters, it suggests that the

older people should be regarded as one of the most vulnerable groups in order to foster all generations' resilience. It also suggests that age-disaggregated data should be systematically collected and used for effective disaster risk management, at the same time, for "no one left behind".

Keywords: Humanitarian Aid, Natural Disaster, Sendai Framework,
Ethiopia, Indonesia, Older People

Student Number: 2017-24662

Table of Contents

List of Abbreviations, Figures, and Tables

Chapter 1. Introduction.....	1
1. Background.....	1
2. Structure of Study.....	3
3. Limitations.....	6
Chapter 2. Literature Review.....	7
1. Vulnerability of Older People in Natural Disaster	7
2. Exclusion of Older People in Humanitarian Data	10
3. Capacity and Contribution of Older People in Natural Disaster	16
Chapter 3. Research Design.....	20
1. Theoretical Framework.....	20
1.1. Sendai Framework 2015-2030.....	20
1.1.1. Seven Global Targets.....	21
1.1.2. Four Principles for Action.....	22
1.1.3. Principle (d) in Sendai Framework.....	24
2. Case Studies.....	25
2.1. Ethiopia	25
2.2. Indonesia	27
Chapter 4. Analysis.....	28
1. Drought in Ethiopia, 2017.....	28
1.1. Background of Drought in 2017.....	28
1.2. Analysis based on the Sendai Framework	28
2. Tsunami in Indonesia, 2018	36
2.1. Background of Tsunami in 2018.....	36
2.2. Analysis based on the Sendai Framework.....	37
Chapter 6. Conclusion.....	44

Bibliography.....	47
Abstract (Korean).....	50

List of Abbreviations and Tables

List of Abbreviations

BNBP	National Disaster Management Agency, Indonesia
CODs	Common Operational Datasets
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
EHF	Ethiopia Humanitarian Fund
HCT	Humanitarian Country Team
GFDRR	Global Facility for Disaster Reduction and Recovery
IASC	Inter-agency standing committee
LDC	Least Developed Countries
MIRA	Multi-Sector Initial Rapid Assessment
NCDs	Non-Communicable Diseases
RAM-OP	Rapid Assessment Method for Older People
RNA-OP	Rapid Need Assessment of Older People and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNISDR	United Nations for Disaster Risk Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs

List of Tables

Table 1 – Data disaggregation requirements in Sendai Framework

Table 2 – Data disaggregation requirements in IASC Guidelines on
CODs in Disaster Preparedness and Response

Table 3 – Data disaggregation requirements in MIRA Guideline

Table 4 – Data disaggregation requirements in Post-Disaster Needs
Assessments Volume A Guidelines

Table 5 – Seven Global Targets of Sendai Framework

Table 6 – Four Priorities for Action of Sendai Framework

Table 7 – Sendai Framework Data Readiness Review Report, Ethiopia

Table 8 – Sendai Framework Data Readiness Review Report, Ethiopia

Table 9 – Sendai Framework Data Readiness Review Report, Ethiopia

Table 10 – Sendai Framework Data Readiness Review Report,
Indonesia

Chapter 1. Introduction

1. Background

Globally, ageing population has rapidly increasing. According to data in World Population Prospects: the 2017 Revision from the United Nations, 2017, published by the United Nations Department of Economic and Social Affairs (UNDESA) Population Division, the number of people aged 60 or older is supposed to more than double in 2050 and more than triple in 2100, increasing from 962 million around the world to 2.1 billion in 2050 and 3.1 billion in 2100. In addition, according to the World Population Prospects: The 2015 revision, 2015, written by UNDESA Population Division, by 2050, the number of elderly people over 60 and children under 15 will be nearly same. At the same time, between 2005 and 2014, disasters caused \$1.4 trillion in total damage worldwide, 1.7 billion people were injured, and 0.7 million people were killed. Along with climate change, the world has been experiencing more frequent and more hazardous disasters. Therefore, the older people are becoming a significantly important group, considering their vulnerabilities and contribution, during and after the disasters.

However, data evidently reveal that older people are unfairly supported in disaster-related disease and mortality. While Hurricane Katrina hit New Orleans in 2005, 75 percent of the deaths were 60 or older, although the age group accounted for 16 percent of the local population (Wilson, 2006, pp. 8-

13). Similarly, in the 2011 tsunami in Japan, 56 percent of the deaths were 65 or older, despite the age group, which accounts for 23 percent of the population (Helpage International, 2013a). Data from low- and middle-income countries show a similar result. According to Philippine government data, when Typhoon Haiyan occurred in November 2013, 151 out of 393 people killed (38.4 percent), were aged 60 or older, even though older people takes up only 7 percent of the total population. In Nepal, 18 percent of the 678 people injured or killed by the 2015 earthquake were over 60 (Helpage International, 2013a).

However, the core of humanitarian aid is the principle of humanity and impartiality. Everyone has equal rights and dignity; to exclude individuals or groups based on age, religion, nationality, or culture is contrary to the humanitarian principle. Therefore, to effectively respond to natural disasters around the world and to reduce the damage, the United Nations presented a Hyogo Framework from 2005 to 2015, suggesting that vulnerable groups, regardless of cultural diversity and age, should be considered to effectively achieve disaster relief goals. Given that Hyogo Framework was simply aimed at reducing disaster damage, the Sendai Framework, which focuses on resilience-building and preparedness for natural disaster, sets out goals from 2015 to 2030. Like the Hyogo framework, it encourages the international community and individual countries to provide more comprehensive and nondiscriminatory support.

2. Structure of Study

The study aims to answer two main questions:

- (1) After the Sendai Framework was introduced and implemented, have older people in natural disaster been able to receive humanitarian aid properly and get help build resilience?
- (2) Regardless of national economy situation, such as least developed countries and developing countries, Does the older people remain vulnerable in natural disaster situations?

To answer these questions, first, this study provides general description on the exclusion phenomenon of the older people in the international humanitarian aid for a justification. The study is based on a comparative case study of Ethiopia and Indonesia. Specifically, in the thesis, international humanitarian aid for drought in Ethiopia 2017, and tsunami in Indonesia 2018, is to be analyzed to check whether the older people remain vulnerable in natural disaster situation regardless of national economy situation. In addition, these comparative case studies show whether the older people are not marginalized and supported as vulnerable groups after the Sendai Framework introduced and implemented. To do so, this thesis analyzes how Ethiopia and Indonesia have carried out these four priorities for actions in the Sendai Framework. This helps to determine whether older people are getting support in natural disaster after the Sendai Framework has been implemented. First, for Priority 1, the Sendai Framework Data

Readiness Review Report from each country determine whether the country has data about natural disasters and how it perceives them. To check that older people are not excluded from this process, data classified by gender and age is to be reviewed. To verify the implementation of Priority 2, this thesis analyzes the existence of national platforms, government agencies, and related regulations in each country. This part especially tries to ascertain whether there is a specific policy, rules, or regulations for the older people who are vulnerable in natural disaster. For Priority 3, it reviews the international humanitarian aid, and tries to review the total amount of aid, the number of projects and so on during and after the natural disaster in both countries. In doing so, it tries to analyze whether international humanitarian aid has benefited equally regardless of age, without discrimination. Finally, as Priority 4 refers to the need to prepare disaster in advance, reduce the disaster risk and effectively respond and recover at all levels, this part will systematically review whether the elderly were properly supported during and after the natural disaster, and see how effective it was.

Main sources of data are Sendai Framework Data Readiness Review Report submitted by Ethiopia and Indonesia, Ethiopia Humanitarian Fund (EHF) Annual Report 2017 from UNOCHA (United Nations Office for the Coordination of Humanitarian Affairs) and Central Sulawesi Earthquake & Tsunami Humanitarian Country Team Situation Report written by Humanitarian Country Team in Indonesia to analyze overall international

humanitarian aid during humanitarian crises; drought and tsunami. Also, government official reports from both countries related to the disaster risk reduction are used.

However, due to limitation on relevant data for older people, this study uses data from Rapid Need Assessment of Older People (RNA-OP) conducted by Helpage International in Ethiopia and Indonesia. This assessment has utilized the Rapid Assessment Method for Older People (RAM-OP), which employs a two-stage cluster sampling method to identify sample villages called Primary Sampling Units and assessment respondents. The main indicators measured using the methodology where; demography and situation, food intake, severe food insecurity, activities of daily living, mental health and well-being, dementia, health and health-seeking behaviour, sources of income, water, sanitation, and hygiene, anthropometry and screening coverage, visual impairment and disability. It gives information on older people needs through a house-to-house survey, which can be used to support programme design. Helpage International conducted RAM-OP both in Ethiopia and Indonesia when there were natural disasters in 2017 and 2018, respectively to meet the demands of older people appropriately. It intends to highlight specific challenges, opportunities and solutions (HelpAge International, London, 2017).

3. Limitations

This study has two limitations. First, there was no appropriate and desirable framework to analyze the support of the elderly in natural disaster, so the Sendai framework, which is universally accepted for disaster risk management (DRM) was applied. Second, despite recommendations from various international organizations that the older people are vulnerable group before, during and after the natural disasters, it was difficult to find data that categorized the older people separately or categorized data. To complement, data containing the older people was utilized as much as possible in analyzing them based on the Four Priorities in the Sendai framework. In addition, there were no reports reviewing the effectiveness of international humanitarian aid project for older people, so RNA-OP reports were reviewed to fill the data gap. Hope that in the future research, framework and data for the elderly will be fully developed for academic purpose.

Chapter 2. Literature Review

1. Vulnerability of Older People in Natural Disaster

Each year, nearly 26 million elderly are influenced by natural disasters (Helpage International, 2016). Generally, the provision of the international humanitarian aid does not exclude older people and support for women also include older women's demands. Therefore, general aid provision meets some of the needs of older people. However, when the tsunami disaster in Asia occurred, an investigation carried out by HelpAge International revealed that less than 1 percent of the humanitarian aids arranged by the major donors in India, Sri Lanka and Indonesia were targeted at the elderly (Wells, 2005).

In addition, Helpage International carried out a research of total of 1,912 projects in 12 humanitarian crises through UN Consolidated Appeals Process and Flash Appeal from 2007 to 2009 to confirm whether international humanitarian aids supported for the elderly. Financial Tracking Service managed by UNOCHA was used for the data collection tool. The research found that there is a critical disparity between the requirements of older people and the humanitarian assistance. There is little reference to the elderly within the proposal, while references to other vulnerable groups could be easily found. Among five severe crises, including crises in Afghanistan and El Salvador, there were no projects in any sector explicitly

mentioned or providing targeted support to the elderly. Of the 1,912 projects analyzed, only 93 projects (4.9 percent) explicitly referred to the elderly as vulnerable, while only 619 were for women and children (32.0 percent) (Helpage International, 2010).

Same research was done from 2010 to 2014 with UN Strategic Response Plans and 16,221 projects were analyzed that were conducted between 2010 and 2014. As a result, only 154 people included activities specifically aimed at the elderly; only 74 (48 percent) were funded. The 855 projects included activities referring to the elderly along with other vulnerable groups, of which 439 (51.3 percent) were funded. Of the 154 projects that included at least one project or program for the elderly, there were only 61 projects (39 percent). In addition, only the European Commission Humanitarian Aid department and Japan, major donors, have constantly provided funding for projects that address the needs of the elderly (targeted support or senior citizens' assistance with other vulnerable groups). The U.S. provided all but one year of funding (Helpage International, 2016).

These two researches, from 2009 to 2014, describes a significant observation into how the humanitarian system fails to address the demands of older people in a crisis. It also suggests that evidence and knowledge of requirements of older people is either unavailable or, if available, it fails to apply into projects. On the contrary, where evidence of the specific needs for other age group is available, targeted projects or programs have become

the standards in humanitarian aid, explained by the number of child-focused health, nutrition interventions and humanitarian protection.

Even though older people are particularly vulnerable when natural disasters occur, their requests are often neglected owing to their invisibility. The lack of support for elderly in emergency situations was one of the concerns raised by various international organizations. The chance of survival and health of older people can be negatively influenced by disasters due to inaccessibility to medical care and social support, psychological and mental issues and injuries. Also, they are relatively prone to communicable diseases and worsening of existing medical conditions. The neglect of older people in natural disasters is apparent: in five major natural disasters, over 50 percent of deaths consistently occurred among people over 60 (WHO, 2015). The older people are at risk even in countries with alert system for disaster and healthcare systems. For instance, during the heat wave in France, 2003, there were 14,800 deaths, and 70 percent were people over 75 years old (Hutton, 2008); About 75 percent of the dead, when the Hurricane Katrina hit in 2005, were older people over 60 (Inter-Agency Standing Committee, 2008); 56 percent of people who were killed in 2011 Japan earthquake were aged over 60 (United Nations Population Fund, HelpAge International, 2013a).

To be specific, there are four reasons explaining vulnerability of elderly in the face of natural disaster. First, older people usually suffer from

physical decline resulting from ageing, which can include mobility, chronic disease, poor sight and hearing. Second, there are lack of social services for older people in emergency situations. Third, discrimination based on age is another barrier. Fourth, older people usually suffer from poverty and hunger because of poor social security system. The physical challenges of older people cause difficulties in responding and preparing for natural disasters. The elderly can save food and water, guide domestic animal to safety, or make long-distance trips. The weak and poor elderly, who are alienated from family, are more at risk without social protection. Furthermore, many elderly may be hard or unwilling to leave their villages and homes, even the locations is dangerous during and after disaster (Helpage International, 2014, p.6).

2. Exclusion of Older People in Humanitarian Data

Effective humanitarian support counts on assessment and correct data. In 2015, international community committed to the Sendai Framework, which requires collection of sex- and age-classified data to effectively respond and prepare to natural disaster. In 2016, the World Humanitarian Summit forged commitments that emphasized the need to “leave no one behind” and to transform the delivery of humanitarian action to people who were affected by disasters, conflicts and other emergencies. These global commitments – by states and non-state actors – have consistently called for the systematic

analysis, collection, dissemination and disaggregated data to provide more accurate information about the severity of the impact of disasters and the needs of all social groups and sectors based on age, sex, disability, and other determinants of social vulnerability; 1) Sendai Framework for Disaster Risk Reduction 2015-2030, 2) Inter-agency standing committee (IASC) Guidelines on Common Operational Datasets (CODs) in Disaster Preparedness and Response (2010), 3) Multi-Sector Initial Rapid Assessment (MIRA) Guideline, and 4) Post-Disaster Needs Assessments Volume A Guidelines 2013 (Helpage International, 2019, p.18-24).

Table 1. Data disaggregation requirements in Sendai Framework

<p>Data Realm</p>	<p><7 targets></p> <ul style="list-style-type: none"> • reduce disaster mortality • reduce the number of affected people • reduce direct disaster economic loss • reduce disaster damage to critical infrastructure and disruption of basic services • increase the number of countries with national and local disaster risk reduction strategies • enhance international cooperation to developing countries • increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments
<p>Data required in relation to population and older people</p>	<p><Disaster mortality></p> <ul style="list-style-type: none"> • Number of deaths and missing persons attributed to disasters, per 100,000 population • Number of missing persons attributed to disasters, per 100,000 population <p><Number of people affected></p> <ul style="list-style-type: none"> • Number of people directly affected

	attributed to disasters, per 100,000 population • Number of people injured or ill attributed to disasters, per 100,000 population • Number of people whose damaged dwellings were attributed to disasters • Number of people whose destroyed dwellings were attributed to disasters • Number of people whose livelihoods were disrupted or destroyed attributed to disasters
Disaggregation requirement	OIEWG noted that data disaggregation might not be immediately feasible across all member states (Sendai Data Readiness Review)

Source: Helpage International, 2019, p.18-24

Table 2. Data disaggregation requirements in IASC Guidelines on CODs in Disaster Preparedness and Response

Data Realm	7 Data sets: • Humanitarian Profile • Population Statistics • Administrative Boundaries • Populated Places • Transportation Network • Hydrology and • Hypsography
Data required in relation to population and older people	<For Humanitarian Profile> • internally displaced • non-displaced affected • host family/resident community affected • refugee • dead • injured • missing <For Population Statistics> • Total population by admin level (Individuals) • Total population by admin level (Number of Households) • Age • Sex

	<Average family size by admin level>
Disaggregation requirement	Aggregate (total population only)

Source: Helpage International, 2019, p.18-24

Table 3. Data disaggregation requirements in MIRA Guideline

Data Realm	<p><Analytical Framework></p> <ul style="list-style-type: none"> • Humanitarian profile: Geographical scope and scale of the crisis; estimate of the number and type of affected groups • Severity of the crisis; estimate of the number of people in need at each sector level • Gaps in response; estimate of the number of people whose needs cannot be fulfilled with the current level of response or capacity • Operational constraints: Operational constraints; estimate of the people in need unable to receive regular assistance
Data required in relation to population and older people	<p>Phase 1 (first 1-3 days after a disaster)</p> <p><Geographical characteristics></p> <ul style="list-style-type: none"> • Administrative area • Setting (urban/rural, coastal/inland) • Composite (population density, exposure to secondary risks, etc.) <p><Population or group characteristics></p> <ul style="list-style-type: none"> • Affected groups (IDPs/affected residents) • Vulnerable Groups • Socio-economic groups • Sex and age
Disaggregation requirement	<p>Disaggregate by sex, age and other relevant vulnerability criteria by theme (may be reliant on presence of specialist in the team to ensure disaggregation and analysis)</p>

Source: Helpage International, 2019, p.18-24

Table 4. Data disaggregation requirements in Post-Disaster Needs Assessments Volume A Guidelines

Data Realm	<p><Core elements></p> <ul style="list-style-type: none"> • Disaster effect (infrastructure, service delivery, governance, risks, vulnerabilities and impact) • Disaster impact (macroeconomic, human and social development)
Data required in relation to population and older people	<p><Baseline data></p> <ul style="list-style-type: none"> • Total population • Population density per sq km • Age 0-14 • Age 15-59 • Age 60 and above • Rural / urban • Male /female headed households • Literacy rate (15-24 yrs.) (female / male) • Life expectancy (female /male) • Human poverty index • Human development index • Urban poverty • Rural poverty • Per capita income • Infant mortality rate • Maternal mortality rate <p>Pre-disaster data for each sector</p> <p>Nature and extent of pre-disaster hazards, vulnerabilities and risks</p> <p>National regional (or local) development plans, socio-economic goals in the short term, and poverty reduction strategies</p>
Disaggregation requirement	<p>Suggests data to be disaggregated by sex and age and to pursue a gender analysis, including cost of accessing goods and services (cost to individual/ household to procure goods/ services)</p> <p>A consideration during assessment is to focus on social exclusion and the</p>

	measures needed to ensure universal access to all basic services, be it women, girls, men, boys, the physically disabled, youth, older people, vulnerable population groups, the landless, or persons with HIV/AIDS
--	---

Source: Helpage International, 2019, p.18-24

Even though there are specific standards and regulations for collecting age-classified data, in practice, data about older people at risk of disasters is one critical blind spot. Even though international organizations such as UN and Helpage International have emphasized the importance of collecting age-inclusive data, the research found that only one in five organizations collected age- and sex-disaggregated data in all their disaster preparedness initiatives. Also, only one in three agencies collected age-inclusive data in all of their emergency responses. This is particularly disappointing considering the fact that guidelines and tools for the classification of data by sex, age and disability are available from sources such as the Sendai Framework, IASC Gender Handbook and Humanitarian Inclusion Standards for Older People and People with Disabilities (Helpage International, 2019).

Several other findings of the study indicate how older people are excluded in data. For example, in most emergency responses, data concerning older people is collected using a single category, such as ‘over 60’, instead of distinguishing between people aged 60–70, 70–80 and over 80. Furthermore, the report found that although some agencies collected

data from and about older people, they did not use age as a unit or area of analysis (Helpage International, 2019).

Another disturbing trend revealed by the study was that older people are only stated as part of a ‘household’, ‘vulnerable group’ or ‘affected population’. Thus, the assistance they receive is a standard package, which may not address their specific needs. In all of 226 documents reviewed, only little number of reports had specific recommendations to address the requests of older people. Often, “priority” for older people only meant they should be first to receive assistance, but the types of assistance were the same for all vulnerable groups (Helpage International, 2019). When priority is not matched with appropriateness in the different response phases, the issue of exclusion worsens. Of the disaster reports reviewed, none discussed how many older people were reached or what actions were undertaken to address their identified needs. Although some reports described older people as a group in need or vulnerable group, few documents mentioned older people can devote to their community’s recovery process (Helpage International, 2019).

3. Capacity and Contribution of Older People in Natural Disaster

Older people generally have experiences and skills that are essential for understanding the threats in local environments. Therefore, it is vital to admit that ability of older people and support them to become a real asset to

the disaster management activities, from assessment to building a resilience. Firstly, older people usually have knowledge on local environment and risk profiles. Secondly, older people have more time to spare in disaster risk reduction (DRR) activities as well as encourage other community members to participate than younger generations, because they are less involved in economic activities. Thirdly, especially older women play an important role in caring their families and nurturing grandchildren. Not only do they have their own need for protection during the crisis, but their role as care giver to other people, such as infants and younger generations, is also very important during and after disaster. Finally, older people usually have strong motivation to make the safer world for their descendants. The experience and skills are their strong points, but this fact is often overlooked by international organizations, NGOs, governments and donors. They tend to view older people as a just passive aid recipient (Helpage International, 2014, P.6). However, they can be an active contributor. For instance, older people can remember the similar natural disasters in the past, expressing their opinion about what should be improved for the preparedness and recovery. In addition, they have knowledge in a climate pattern over time, and help community to prepare for a possible disaster. Based on wisdom, older people, if they are guaranteed for the proper support, can be a great asset to strengthen major DRRs and preparatory process (Helpage International, 2014, P.14).

Older people have abilities to acquire a variety of skills from work life, from carpentry to childcare, rebuilding the house, or nursing, which are very essential for recovery. For example, joining a local emergency rescue team and volunteering to monitor river levels. INGOs and NGOs participated in DRR activities often have a prediction that older people have difficulties in learning new things and changing the way they behave. These misunderstandings only make elderly weaker. Older people can be passionate to learn skills to make them more resilient, including their families and communities (Helpage International, 2014, p.7).

The distinctive example is that older people in Peru design accurate weather forecasting skills for preventing and preparing natural disasters. In Peru, older people who are 60 to 75 in their age have tried to adjust weather forecasts. The arariwa in Quechua (“guardian of the fields) refers to traditional weather forecasters in Peru. The local early warning system shows the weather forecasts. To be specific, if some kinds of birds build their nests at the higher place near the lake, there will be likely to rain. On the contrary, if they build the nest in lower place, a drought will happen. When people can hear seagulls, a storm is coming, so it can be a warning sign to people for seeking the safer place. However, climate change is the reason of changes in the animals’ behavior pattern, which become barriers for elders to forecast the weather. As a result, several arariwas are using scientific information for accurate observations. It also encourages smaller

farmers to take certain precautions and adaptations, including planting early or later, growing plants in various areas to adapt in climate change based on rainfall patterns in recent years (Claverías, 2012).

Chapter 3. Research Design

1. Theoretical Framework

1.1. Sendai Framework 2015-2030

In 2005, Hyogo Framework for Action (HFA) 2005-2015 agreed by over 162 countries with the desire of the world to mitigate loss from natural disaster. According to the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disaster, 2005, published by United Nations for Disaster Risk Reduction (UNISDR), the ambitious goal is to consistently reduce losses caused by natural disaster through strengthening the resilience (UNISDR, 2005). In HFA, there are eleven priorities for action in General Consideration to determine expected outcomes and appropriate actions to achieve global goals to respond natural disasters. Especially, (e) explains about “Cultural Diversity, age, and vulnerable groups should be taken into account when planning for disaster reduction, as appropriate.”

UN Member States adopted the Sendai Framework for Disaster Risk Reduction in 2015-2030 in March 2015, considering lessons learned from HFA. The objective is to manage the disaster risk at multilevel and multi sectors. To be specific, it focuses on implementing the comprehensive measures, making effective management for recovery, and ultimately strengthening resilience in line with sustainable development. The most

significant shifts of Sendai Framework are to highlight the disaster risk management and importance of building resilience, defining seven global goals as well as addressing guidelines for a active role of states to prepare and respond to risks and participation of all society. Moreover, the range of disaster risk reduction has greatly expanded to not only natural disaster, but also human-caused risks. The Sendai Framework also focuses on the preparedness for "Build Back Better," guiding the actors about their responsibility. It is evident that the framework indicates the importance of global and regional platforms to manage and reduce the disaster risk. Another positive point is the demand to make decisions through disaggregated data based on gender, age and disability, allowing a broad understanding the impacts of disasters on women, children, elderly and the disabled. The text also emphasizes the importance of inclusion and consulting for the vulnerable group. In addition, Sendai framework seeks harmony and cooperation between developed and developing countries.

1.1.1. The Seven Global Targets

The seven strategic targets with 38 indicators for monitoring improvements on the disaster risk reduction activities and disaster management. These indicators should be applied and implemented in conjunction with the Paris Agreement on climate change and Sustainable Development Goals to achieve ambitious goal.

Table 5. Seven Global Targets of Sendai Framework

(a)	Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005–2015
(b)	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015
(c)	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;
(d)	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030
(e)	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020
(f)	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030
(g)	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Source: UNISDR, 2015

1.1.2. Four Priorities for Action

Based on lessons from the application of the HFA, individuals, societies, states and international organizations are required to take active and intensive measures in line with the Four Priorities for Action.

Table 6. Four Priorities for Action of Sendai Framework

Priority 1	Understanding disaster risk.
Priority 2	Strengthening disaster risk governance to manage disaster risk.
Priority 3	Investing in disaster risk reduction for resilience.
Priority 4	Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Source: UNISDR, 2015

The national and international organizations and related stakeholders should consider the projects or activities based on these four priorities and should appropriately carry out them, in national regulations or laws.

In Priority 1, policies and implementing that policies about disaster risk management should be depended on comprehensive assessment of capacity, vulnerabilities, impacts on individuals, and characteristics of risks. This will be useful when preventing and mitigating disaster risks, properly preparing for a disaster, and developing and implementing effective responses. Priority 2 specifies that national and international disaster risk governance is necessary for adequate management of risks and losses. This priority requires evaluation and officially report progress on national DRR plans. It calls on national governments to adopt and conduct plans and strategies with suggested indicators and targets. It requests for the appointment of national focal points. Priority 3 suggests that it is essential to improve various resilience, such as social, and economic resilience of individuals, countries,

region and world, for preventing and reducing disaster risk reduction by private and public investment. Through this measure, individuals and countries could lead to prevent losses and ensure sufficient recovery. Lastly, Priority 4 emphasizes the importance of coordinating and ensuring capacity for practical response and recovery. The key is that equality and impartiality, regardless gender, age, and disability, of should be considered to make effective response, recovery and reconstruction (UNISDR, 2015). Improving response capability and protecting vulnerable groups are major concern within the Priority 4.

1.1.3. Principle (d) in Sendai Framework

Especially, principle (d) suggests comprehensive and nondiscriminatory support for people. According to the Sendai Framework for Disaster Risk Reduction 2015–2030, 2015, published by UNISDR, the principle (d) states that “Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and nondiscriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens.” The Sendai Framework clearly address that

everyone deserves the equal protection before, during and after a natural disaster.

2. Case Studies

For comparative case study in this paper, Ethiopia and Indonesia are to be analyzed. Ethiopia is classified as a Least Developed Country in 2017 and 2018 by World Bank and member states of UN since November 1945. Indonesia is the one of the most populated country, ranked the fourth in the world. Indonesia is an emerging middle-income country, lowering the poverty rate to more than half in 2018 (9.8 percent), compared to 1999. Both countries were affected by massive natural disasters in 2017 and 2018, respectively, and were fit to proceed with case studies in agreement with the Sendai Framework.

2.1. Ethiopia

Ethiopia is a country located in the northeastern part of Africa. In 2017, Ethiopia, with about 105 million people, is one of the most populated nation in Africa after Nigeria, and the shows rapid economic growth in the Africa region. However, a per capita income is \$783 in Ethiopia, which clearly shows that it is still under poverty and hunger. Ethiopia desires to enter the lower-middle-income country by 2025 (World Bank 2019). Generally, natural disaster such as drought, flood and civil conflict has left Ethiopia in

a trouble. According to the World Bank in 2018, life expectancy is 63 years (men), 67 years (women) each.

Regarding the disaster context, Ethiopia has experienced numerous threats from nature like floods, droughts, and volcanoes. Poor economy situation depending on specific crops affected by rainfall and climate change have made the country vulnerable to natural disaster. The country has suffered from consistent droughts since the 1970s. An increasing population and the difficulty in managing natural resources have caused Ethiopia's vulnerability. About 80 percent of all its surface water located in the west and south-west of the region, where people rarely live. Only 10 to 20 percent of the surface water sources are in the East and central parts of Ethiopia, where 60 percent of people live (UNDP, 2012).

Regarding older people's general situation in Ethiopia, because of no available age-disaggregated data, it is harder to analyze of the older people's situation and wellbeing in Ethiopia. However, the Central Statistics Agency census report demonstrated that 3,565,161, taking up about 5 percent of the total population, are recorded as older people who are 60 above in 2007 (CSA, 2012). With this rapid population ageing rates in Ethiopia, the number of older people will become 5.3million by 2020 (CSA, 2012). Older people in Ethiopia are chronically suffered from malnutrition, hunger, poverty, insufficient health services, regardless where they live (Helpage International, 2013b). Especially about the health status of older people in

Ethiopia is a serious concern. In 2012, HelpAge found that 75 percent of older people, who did the survey, mentioned that they have NCDs (Helpage International, 2017).

2.2. Indonesia

Indonesia has achieved impressive economic growth since 1990s. The GDP per capita has constantly risen to \$3,877 in 2018, compared to \$807 in the year 2000 (World Bank, 2018). However, about 26 million people remain below the poverty line. In 2017, it is reported that 21 percent of the population is under poverty (World Bank, 2018).

About disaster context of Indonesia, Indonesia is disaster-prone country and suffers from multiple hazards, including, tsunami, volcano, flooding, earthquakes, and cyclone, because it is in the “Pacific Ring of Fire”. The average of 20 earthquakes per day has been occurred and nearly 500 volcanoes erupted until 2015 (BNPB, 2016, p.10-12).

About older people in Indonesia, Indonesia has the fifth-largest population of older people in the world (UNFPA, 2012). Nearly 21 million elderly live in Indonesia. The older people are expected to consist 11.34 percent of population in Indonesia by 2020 (UNFPA, 2012). Older women are hard to access to education and tend to be ignored in societies (Helpage International, 2018).

Chapter 4. Analysis

1. Drought in Ethiopia, 2017

1.1. Background of Drought in 2017

Humanitarian needs have continued to rise in 2017, which was linked to the severe drought. Between August and December 2017, the number of people who request emergency food assistance is 8.5 million (Statistics Indonesia, 2012). These people required urgent need of food and emergency support. In Ethiopia, approximately 80 percent of the population count on the agriculture for their daily life, so the effects of the drought caused mainly by El Niño between 2015 to 2016 were devastating. There was rapid decrease in crop production, which is about 50 to 90 percent, decrease in farmers' income, and increase in food insecurity (Government of Ethiopia, 2018, p.7).

1.2. Analysis based on the Sendai Framework

1) Priority 1: Understanding disaster risk

The Ethiopian government submitted Sendai Framework Data Readiness Review Report in 2017. As Table 7 shows (*emphasis added*), Ethiopia already established national database and has collected the data about disaster loss since 2005. Furthermore, it has collected loss data associated with a hazard type. However, the government has not collected specific data, disaggregated by age, gender, and disability. Ensuring that there is age-

inclusive data in all phases of disaster risk assessment and reduction has been called for since the Madrid International Platform for Action in 2002, not just the Sendai Framework in 2015. When a government fails to collect and evaluate the detailed data and information, assistance cannot reach to people in need. Therefore, it demonstrates that older people in Ethiopia are inadequately included in data collection relating to preparedness for and response to disasters.

Table 7. Sendai Framework Data Readiness Review Report, Ethiopia

Question	Answer
Do you have a national database for collecting disaster losses?	Yes
Do you collect disaster loss data disaggregated by event?	Yes
Do you collect disaster loss data associated with a hazard type?	Yes
Do you collect disaster loss data at all scales, including small-scale disasters?	Yes
Does the collected disaster loss data cover the entire period 2005-2015?	Yes
Do you collect number of deaths attributed to disasters disaggregated by age?	No
Do you collect number of deaths attributed to disasters disaggregated by sex?	No
Do you collect number of missing persons attributed to disasters disaggregated by age?	No
Do you collect number of missing persons attributed to disasters disaggregated by sex?	No
Do you collect number of injured or ill people attributed to disasters disaggregated by age?	No
Do you collect number of injured or ill people attributed to disasters disaggregated by sex?	No
Do you collect number of people whose dwellings were damaged attributed to disasters disaggregated by age?	No
Do you collect number of people whose dwellings were damaged attributed to disasters disaggregated by sex?	No
Are all people in areas prone to major hazards covered by early warning information?	Yes

Source: Government of Ethiopia, 2017

2) Priority 2: Strengthening disaster risk governance to manage disaster risk.

After suffering from the 1974 famines, the Government of Ethiopia has started DRM, establishing the Relief and Rehabilitation Commission (Government of Ethiopia, 2018, p.7). According to the Global Facility for Disaster Reduction and Recovery (GFDRR), since then, Ethiopia has taken a several stages to make more active and adequate DRM, such as creating the Disaster Management and Food Security Sector under the Ministry of Agriculture and has played major roles in DRM activities in Ethiopia. Especially, with updating the National Policy and Strategy on Disaster Management in 2013, which means an amendment of the 1993 National Policy on Disaster Management, the updated policy suggests a comprehensive DRM framework. It explains general guidelines and how to implement strategies, including early warning system, risk assessment tool, information management, and decentralized DRM system. The main objective of the policy is to establish integrated and coordinated DRM system along with the sustainable development for DRR. As Ethiopia has experienced various natural disasters since the past, DRM has been relatively well developed in national platform (Ethiopian National Disaster Risk Management Commission, 2013).

Also, in Sendai Framework Data Readiness Review Report, Ethiopian government already reported that it has DRR strategy to define

responsibilities, define targets, and reduce existing risk. Therefore, it can be analyzed that Ethiopia has well developed and maintained national governance to reduce disaster risk and prepare for it.

Table 8. Sendai Framework Data Readiness Review Report, Ethiopia

Question	Answer
Do you have a national DRR strategy?	Yes
Is your national DRR strategy adopted?	Yes
Is your national DRR strategy implemented?	Yes
Does the DRR strategy have clear targets?	Yes
Does the DRR strategy have indicators?	Yes
Does the DRR strategy define roles and responsibilities?	Yes
Does the DRR strategy prevent the creation of new risk?	Yes
Does the DRR strategy reduce existing risk?	Yes
Does the DRR strategy strengthen economic, social, health and environmental resilience?	Yes
Is the DRR strategy based on disaster risk assessment?	Yes
Is there an institution in charge of collecting, consolidating and storing loss data?	Yes, National Disaster Risk Reduction Commission

Source: Government of Ethiopia, 2017

3) Priority 3: Investing in disaster risk reduction for resilience.

Throughout 2017, the Government of Ethiopia and humanitarian partners rapidly responded to severe drought. In 2017, over \$94.2 million of the funds were allocated through EHF¹ for supporting 124 projects. The EHF

¹ EHF responds not only to natural disasters, including droughts, floods and so on, but also to conflict-related crises. The EHF goal is to ensure timely disbursement of funds to the

received the second highest donors' contributions globally. The major donors, such as Ireland, Germany, Norway, Sweden, Republic of Korea, United Kingdom, United States of America and Switzerland, supported about \$82.4 million (UNOCHA Ethiopia, 2018, P.7). The allocations were made based on prioritized activities, including lifesaving, determining the needs of the vulnerable group and assessing immediate and highest impact. According to Ethiopia Humanitarian Fund Annual Report 2017, about 22 million people had been supported; 23 percent were girls; 26 percent were boys; 25 percent were women; 25 percent were men. Even though there were age-classified data, it only explains about the younger generation; boys and girls. It is hard to identify how many older people could get support from international humanitarian aid (UNOCHA Ethiopia, 2018, P.6).

Another problem is also revealed in the Sendai Framework Data Readiness Review Report. Ethiopian government stated in the report that the country has not collected detailed and classified data on ODA support for national DRR actions and disaster risk reduction capacity building.

most vital humanitarian relief in line with both the annual HRD and unexpected emergency assistance. (UNOCHA Ethiopia, 2018, p.6)

Table 9. Sendai Framework Data Readiness Review Report, Ethiopia

Question	Answer
Do you collect data on total official ODA support for national DRR actions?	No
Do you collect data on total official ODA support for the transfer and exchange of DRR related technology?	No
Do you collect data on number of programmes and initiatives for the transfer and exchange of science, technology and innovation in disaster risk reduction for developing countries?	No
Do you collect data on total official ODA support for disaster risk reduction capacity building?	No
Do you collect data on total other official flows in support of disaster risk reduction capacity building?	No
Do you collect data on number of programmes and initiatives for DRR related capacity building in developing countries?	No
Do you collect data on initiatives to strengthen your DRR related statistical capacity?	No

Source: Government of Ethiopia, 2017

Although Ethiopia received the second highest donors' contributions coping with severe drought from international societies, it was hard to find the documented and published specific age-disaggregated data and used those data for planning the program, and for properly evaluating the effectiveness of relief projects.

4) Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

In droughts, where the price of food is generally high, older people, are frequently cannot afford food. As this study found almost no documented and published age disaggregated data, considering the existing data gap, it reviews RNA-OP conducted by Helpage International in Teltelle Woreda of

Borena zone between August 21 to 30, 2017 to analyze how male and female older people experience and are affected by drought. A total of 199 older people (51 percent men and 49 percent women) were sampled and included in the survey (Helpage, 2017). This study specifically reviews the food intake and food security among older people, nutritional status, health and health-seeking behavior, and access to water and sanitation.

Firstly, about food intake and food security, even though the assessment could not get information on the quantity of food served per meal, considering the food shortage situation during the drought and limited kinds of food reported, it can be inferred that older people cannot get the nutritious food, which is required. The evidence is the level of hunger mentioned by older people during the interview. The 61 percent of older people (58 percent of men and 63 percent of women) described some form of hunger as moderate or severe hunger, revealing that their food insecurity is high and explaining the high level of malnutrition. Despite the support for the general population, it was only 40 percent of the older people that mentioned living with their household is getting food aid. Secondly, nutritional status of older people was assessed. The Global Acute Malnutrition rate was estimated at 15 percent with a relatively higher prevalence among older women (19 percent) than older men (11 percent). This is a critical level as per the WHO classification for emergency nutrition intervention. It can be concluded that in older people are generally neglected in household food distribution

(Helpage, 2017). Thirdly, almost 50 percent of the older people reported of suffering from chronic diseases that require regular and proper medication. The prevalence of NCDs among elderly was found to be almost same in the proportion: 50 percent and 48.6 percent respectively. Moreover, 40 percent of older people reported that they are suffering from acute illnesses in two weeks. Unlike NCDs, 42 percent of older women said that they suffer from acute illnesses, while 38 percent of older men come down with acute illnesses. Only 41 percent of older people reported to receive and access to care for the recent illness, while older women shows a 7 percent lower access to health care than older men. The most frequent and prevailing reasons for not getting medication such as NCD drugs were lack of help, which takes up to 50 percent, and the thought that they are too old to look for care (22 percent). Similarly, reasons for not actively finding and requiring care for acute illnesses were lack of help, which takes up to 50 percent, and 16 percent of them told that health care is too expensive. These require an appropriate action in planning and adjusting humanitarian programs to make sure about the age and disability friendly services. Otherwise it can be concluded that even if the supports are available, the older people may not properly access or utilize them. Lastly, the assessment found that only 44 percent of older people are accessible to water for drinking and only 37 percent of older people have access to proper sanitation facilities (Helpage, 2017).

The overall assessment revealed that older people in Teltelle Woreda of Borena zone are in poor conditions that negatively affect their mental and health status. However, the existing emergency nutrition interventions mainly focus on children and Pregnant and Lactating Women (PLW) and programs or projects that aim to support the demands of older people are disregarded. Lack of support for older people negatively influences the quality of lives of the older people as well as the quality of lives of people they live with or care about. Evidences indicated vulnerability of older people is at high during the severe drought in 2017.

2. Tsunami in Indonesia, 2018

2.1. Background of Tsunami in 2018

On 28 September, 7.4 magnitude earthquake with almost 494 aftershocks occurred in Indonesia. And then, this huge earthquake caused a tsunami. The earthquake also resulted in serious levels of land liquification. Approximately 616,600 people have been influenced by this hazardous natural disaster. About 82,000 people have fled, and 2,010 people have been killed as of October 2018. In addition, nearly 10,679 people have injured (WHO, 2018, p.1).

2.2. Analysis based on the Sendai Framework

1) Priority 1: Understanding disaster risk

The aim of Indonesia's comprehensive Guidelines for the Use of Population Data in Disaster Management is to suggest guidelines on the standardization of data related to disaster and inform workers in humanitarian aid field of the use of data for disaster assessment and management (United Nations Population Fund, 2014, p.2). The guidelines especially present that disaster management are usually designed for people with no disabilities who can see, hear, walk, and react quickly to warning. As such, it guides disaster management plan to ensure all groups are properly taken into account and respect diversity. It is important to remember that all vulnerable groups should be equally protected through the national disaster management system (United Nations Population Fund, 2014, p.7). Also, the guidelines emphasize that data collection and analysis should be carried out accurately and rapidly so that valuable and relevant information can be shared. It can be inferred that Indonesia has acknowledged that precise and accurate information and planning depends on the availability of comprehensive supporting data.

As table below shows, the gender- and age-disaggregated data are collected, utilized for assessing and monitoring the humanitarian assistance when natural disaster occurs in Indonesia. Collecting and analyzing of well-categorized data let operational agencies assist equally and appropriately

people in need.

Table 10. Sendai Framework Data Readiness Review Report, Indonesia

Question	Answer
Do you have a national database for collecting disaster losses?	Yes
Do you collect disaster loss data disaggregated by event?	Yes
Do you collect disaster loss data associated with a hazard type?	Yes
Do you collect disaster loss data at all scales, including small-scale disasters?	Yes
Does the collected disaster loss data cover the entire period 2005-2015?	Yes
Do you collect number of deaths attributed to disasters disaggregated by age?	Yes
Do you collect number of deaths attributed to disasters disaggregated by sex?	Yes
Do you collect number of missing persons attributed to disasters disaggregated by age?	Yes
Do you collect number of missing persons attributed to disasters disaggregated by sex?	Yes
Do you collect number of injured or ill people attributed to disasters disaggregated by age?	Yes
Do you collect number of injured or ill people attributed to disasters disaggregated by sex?	Yes
Do you collect number of people whose dwellings were damaged attributed to disasters disaggregated by age?	No
Do you collect number of people whose dwellings were damaged attributed to disasters disaggregated by sex?	No

Source: Government of Indonesia, 2017

2) Priority 2: Strengthening disaster risk governance to manage disaster risk.

The government of Indonesia has reformed institutions, policies, and laws related to DRR after the Tsunami in 2004. The government now has consistent plans for cities, which can be affected from natural disaster,

identifying its weakness, planning the relief response, and preparing to disaster (Center for Excellence in Disaster Management & Humanitarian Assistance, 2018, p.10).

In 2008, Indonesia established the National Disaster Management Agency (Badan Nasional Penanggulangan Bencana, BNPB). In Indonesia, BNPB is the major government agency, which has responsibility from preparedness to recovery. BNPB plays important role in preparing, guiding and adjusting every phase of disaster management. Indonesian government mobilizes the equipment provided by international assistance to respond disasters. Also, Indonesia has decentralized disaster management responsibility for taking effective and efficient measures, guided and supported by the BNPB. Badan Penanggulangan Bencana Daerah (BPBDs) are the disaster management agency in provincial level and have a similar structure to BNPB (Center for Excellence in Disaster Management & Humanitarian Assistance, 2018, p.24-25). When natural disaster hits, at the first phase, municipal level agencies try to manage and respond to it. If the disaster has severe and intense impacts, province and national governments take actions and support municipal level agencies. The government determines and assesses the characteristics of disaster and its risks (BNPB, 2016, p.13). In addition, Indonesia made early warning system to predict tsunami since 2004. It provides early warning, specific information as well as public information. The Indonesian Agency for Meteorological, Climatological, and Geophysics

is a tsunami service provider. UNESCO, UNDP, and the United States all supported in operating the system (Center for Excellence in Disaster Management & Humanitarian Assistance, 2018, p.31).

3) Priority 3: Investing in disaster risk reduction for resilience.

Immediately after earthquake and tsunami, recovery has done by local government agencies, local NGOs, the National Search and Rescue Agency, Indonesian National Armed Forces and even individuals (HCT, Indonesia, 2018, p.1). On 1 October, the Government of Indonesia, through BNPB and Ministry of Foreign Affairs, welcomed international assistance. The Government of Indonesia has experiences and skills to overcome tsunami and earthquake, but considering the scope and severity of the situation, UN agencies and international agencies can provide all the essential and valuable support.

The United Nations' Central Emergency Response Fund (CERF) contributed \$15 million in funding for Humanitarian Country Team (HCT) support. Several UN agencies have also activated funding to help at the first stage after the tsunami, such as UNDP, UNICEF, IOM, WFP, FAO and UNFPA. Since the disaster, several UN Member States have made bilateral pledges or contributions, including UK, ECHO, Australia, New Zealand, Republic of Korea, Italy, and Thailand, for a total of \$30.3 million in financial and in-kind assistance according to BNPB (HCT, Indonesia, 2018,

p.1-2).

According to the HCT Situation Report as of October 2018 issued by the HCT, in Indonesia, it laid out the support for 191,000 people for three months to support and overcome the damage. However, it is hard to find the age-disaggregated data, even though there are relevant and sufficient data about women and children. Having gender- and age-disaggregated data is vital for effective and efficient when delivering a relief, but there are no officially documented or published age- disaggregated data during and after the tsunami in Indonesia.

Another problem is that some bureaucratic measures kept foreign aid workers in Indonesia from participating in the relief process, making registration in advance in Jakarta mandatory. In addition, international NGOs can provide aid but must coordinator with the Indonesian Red Cross or pre-existing regional partner.

4) Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Helpage International conducted RNA-OP in October 2018 in the most earthquake and tsunami-affected areas of: Desa Kawatuna, Desa Kayumalue Pajeko, Desa Sibalaya, Kawatuna, Labuan Lelean, Labuan Panimba, ibalaya. In total, 325 older people participated, consisting of 58 percent women and 42 percent men (Helpage International, 2018). Similar with the analysis

about Ethiopia case, this study focuses on the food intake and food security among older people, nutritional status, health and health-seeking behavior, and access to water and sanitation. Firstly, 52 percent of older men and women said food is their priority. 12 percent of older women and 6 percent of older men had not enough access to food. Secondly, 45 percent of older women and 36 percent of older men cannot access to humanitarian services by themselves. Some are unable to reach service facilities due to lack of support from other people like friends or families. In addition, 19 percent of older women and 10 percent of older men have no ID, so they cannot get proper help and support. Thirdly, the assessment found that 42 percent of older people have a disability. This rate shows similar pattern with global figures suggested by the WHO that report globally over 46 percent of people have a disability (WHO, 2011, p.24). Nearly 50 percent of older women had one or more disability and there was a strong reliance on assistive aids by older people. This demonstrates the need to guarantee older people with disabilities should be included in protection priorities and relief activities. At the time of assessment, most older people can get to healthcare services, but many are unable to get proper treatment or medication. Access to regular medication for chronic diseases was reported as the most serious problem for older people, with over a third of those who need medicine having no access to it and 20 percent of people in danger of running out with medicine available to them for less than three days. Lastly, 44 percent of older women

and 39 percent of older men report insufficient privacy when using sanitation facilities. Without safe, and accessible toilet and bathing facilities, older people are denied their right to water and sanitation. Also, older people are generally low in their mobility, so if facilities are too far away from their house, it is harder for them to access to the place. If older people cannot clean themselves, access safe drinking water, or urinate and defecate in a sanitary way, it threatens their health and dignity (Helpage International, 2018).

The overall assessment shows that older people in the most earthquake and tsunami-affected areas could not get support from the relief programs that negatively influence on health status. Similar with Ethiopia case, the existing emergency relief activities primarily focus on children and women. Evidences, although limited, indicated vulnerability of older people is at high during and after the earthquake and tsunami in 2018.

Chapter 6. Conclusion

Leaving no one behind means that older people as a specific disaster-affected group should be able to receive quality assistance and participate in rebuilding their lives, because it is their rights. Older women and men are not naturally and inherently weak to disasters. They also can be a great asset as a caregiver and they usually have knowledge about local community, helping recovery and rehabilitation activities. Unfortunately, when emergencies strike, they are not recognized valuable group. The humanitarian community must work together to guarantee all people, including older people, have equal rights to get support.

In this study, even after the introduction of the Sendai Framework, the older people are not recognized as vulnerable groups, and there are not enough humanitarian assistance projects for them both in the LDC and developing countries. Although both countries have data collection platform and government agencies for preparing and responding for DRR, it is hard to find official age-disaggregated data and condition of older people before, during and after the natural disaster. When analyzing international aid after the drought in Ethiopia and tsunami in Indonesia, it is also hard to find specific projects supporting older people, because most of the relief and rehabilitation programs were mainly focused on children and women. Even

worse, there were no official documented data about the situation and condition of older people. To fill the data gap, when reviewing the RNA-OP conducted by Helpage International, older people in Ethiopia and Indonesia were under poor condition, especially suffering from food insecurity and health problem. National and international institutional funding bodies for humanitarian aid should guarantee the needs of older people and plan various projects, which are properly and consistently funded. Actions should be made in line with the Sendai Framework, and those actions must be age inclusive without discrimination.

The humanitarian action and relief program should be needs-driven. To do so, understanding and prioritizing needs among populations based on data is vital and proper response should be made through this relevant and accurate data. Without proper data and analysis, it is hard to reach to people who desperately need help. The UN, INGO, and NGO raise their voice that there is often huge disparity between the actual field of natural disaster and relief programs. This study found that lack of data on older people, when disaster hits, is a major obstacle for planning a proper humanitarian assistance. As gender and age-disaggregated data are a requirement of the Sendai Framework, national government should report progress and present how this includes the vulnerable groups such as older people.

The most vulnerable group, including children, women, and older people, should express their requirements, abilities and opinion on disaster,

so that their voice should be acknowledged and integrated to DRR. Only through these efforts, we can make a better and safer world for all.

Bibliography

- (2017). Ethiopia. *GFDRR*. Retrieved from <https://www.gfdrr.org/en/Ethiopia>
- (2018, October 9). Indonesia orders foreign aid workers helping with tsunami effort to leave. *The Guardian*. Retrieved from <https://www.theguardian.com/world/2018/oct/09/indonesia-orders-foreign-aid-workers-helping-with-tsunami-effort-to-leave>
- (2019, April 12). Ethiopia at-a-glance. *World Bank*. Retrieved from <https://www.worldbank.org/en/country/ethiopia/overview>
- (2019, April 12). Indonesia at-a-glance. *World Bank*. Retrieved from <https://www.worldbank.org/en/country/Indonesia/overview>
- BNPB. (2016). Indonesia Country Profile.VR 2016A.
- Center for Excellence in Disaster Management & Humanitarian Assistance of Indonesia. (2018). Indonesia Disaster Management Reference Handbook 2018. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/Indonesia_2018-0618v1.0.pdf
- Claverías R. (2012). Conocimientos De Los Campesinos Andinos Sobre Los Predictores Climáticos: Elementos Para Su Verificación'. Retrieved from http://Clima.Missouri.Edu/Articles/Claverias_Bioindicadores.pdf
- CSA. (2012). 2007 Population and Housing Census of Ethiopia.
- Ethiopian National Disaster Risk Management Commission. (2013). National policy and strategy on disaster risk. Retrieved from <https://www.preventionweb.net/english/professional/policies/v.php?id=42435>
- Government of Ethiopia. (2017). Sendai Framework data readiness review report 2017. Retrieved from <https://www.preventionweb.net/english/professional/policies/v.php?id=53085>
- Government of Ethiopia. (2018). ETHIOPIA 2018 Humanitarian and Disaster Resilience Plan. Retrieved from https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/ethiopia_2018_humanitarian_and_disaster_resilience_plan_2.pdf
- Government of Indonesia. (2017). Sendai Framework data readiness review report (Preliminary report). Retrieved from <https://www.preventionweb.net/english/professional/policies/v.php?id=54276>
- HCT, Indonesia. (2018). Central Sulawesi Earthquake & Tsunami

- Humanitarian Country Team Situation Report.
- HelpAge International London. (2010). A study of humanitarian financing for older people.
- HelpAge International. (2013a). Displacement and older people: the case of the Great East Japan earthquake and tsunami of 2011.
- HelpAge International. (2013b). The state of health and ageing in Ethiopia: A survey of health needs and challenges of service provisions.
- HelpAge International. (2013c). Vulnerability of older people in Ethiopia: The case of Oromia, Amhara and SNNP Regional states.
- HelpAge International. (2014). Disaster resilience in an ageing world: How to make policies and programmes inclusive of older people. Retrieved from <https://www.unisdr.org/2014/iddr/documents/DisasterResilienceAgeingWorld.pdf>
- Helpage International. (2016). End the neglect: a study of humanitarian financing for older people.
- HelpAge International. (2017). Nutrition and health situation of older people in Teltele Woreda of Borena zone, Oromia region, Ethiopia.
- HelpAge International. (2018). Rapid needs assessment of older people affected by the earthquake and tsunami in Sulawesi, Indonesia.
- HelpAge International. (2019). More at risk: How older people are excluded in humanitarian data, 2019. Retrieved from <http://ageingasia.org/how-older-people-are-excluded-in-humanitarian-data/>
- Hutton D. (2008). Older people in emergencies: Considerations for action and policy development, *WHO*.
- Inter-Agency Standing Committee. (2008). Humanitarian action and older persons: An essential brief for humanitarian actors [cited 2016 Dec 21].
- Statistics Indonesia. (2012). Statistical Yearbook of Indonesia 2012. Retrieved from <https://www.bps.go.id/publication/2012/09/24/b54178dc5e6a0581a3b436ee/statistik-indonesia-2012>
- UNDESA. (2015). World population prospects: The 2015 revision. DVD Edition.
- UNDESA. (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP/248.
- UNDP. (2012). Background Report Law and Regulation for the Reduction Of Risk from Natural Disasters in Ethiopia A National Law Desk Survey.

- United Nations Population Fund (UNFPA), HelpAge International. (2012). Ageing in the twenty-first century: A celebration and a challenge.
- United Nations Population Fund (UNFPA), BNPB. (2014). Guidelines for The Use of Population Data in Disaster Management.
- UNISDR. (2005). Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters
- UNISDR. (2015). Sendai Framework for Disaster Risk Reduction 2015–2030.
- UNOCHA Ethiopia. (2018). Ethiopia Humanitarian Fund Annual Report 2017. Retrieved from <https://www.unocha.org/sites/unocha/files/Ethiopia%20HF%20-%20Annual%20Report%202017.pdf>
- WHO. (2011). World Report on Disability 2011.
- WHO. (2015). World Report on Ageing and Health.
- WHO. (2018). Situation Report # 05, Indonesia. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/exsitrep_no5_sulawesi_eq_and_tsunami_20181008.pdf
- Wells J. (2005) Protecting and assisting older people in emergencies, *ODI Network Paper (53)*.
- Wilson N. (2006). Hurricane Katrina: unequal opportunity disaster. *Public Policy & Aging Report (16: 2)*, 8-13.

국문 초록

인도적 지원에서의 노인 소외 현상 연구: 센다이 프레임워크 도입 이후 에티오피아와 인도네시아의 사례를 중심으로

서울대학교 국제대학원

국제학과 국제협력전공

차륜수

전 세계적으로 인구의 고령화는 급속도로 진행중이며, 이와 동시에 기후변화에 따른 자연재해의 빈도와 강도 역시 높아지고 있다. 그러므로 지진, 가뭄, 홍수, 쓰나미와 같은 자연재해가 발생했을 때, 노인은 인구 전체에서 차지하는 비율과 취약성 측면에서 중요하게 다뤄져야 하며, 앞으로도 더욱 중요한 집단이 될 것이다. 그러나 본 논문은 노인들이 재난 상황에서 적절하게 지원을 받고 있지 못하며, 오히려 그들의 권리는 아동, 여성 등 다른 집단에 비해 제대로 보호되지 못하고 있다는 것을 확인했다. 인도적 지원의 핵심 가치는 인류애와 공정성이다. 모든 사람들은 동등한 가치와 존

엄성을 가지고 있으며 이를 보호하기 위해 지원이 이뤄지는 것이다. 그럼에도 불구하고, 노인은 대표적으로 보호받지 못하는 취약한 집단 중에 하나로 확인된다.

본 논문은 보다 구체적으로 인도적 지원에서 노인 소외 현상을 확인하고자 센다이 프레임워크 도입 이후 발생한 에티오피아의 2017년 가뭄 사태와 인도네시아의 2018년 쓰나미 사태에 대해 센다이 프레임워크의 4가지 행동우선순위에 따라 분석했다. 흥미롭게도 두 국가 모두 정부 차원의 재난위험관리 플랫폼과 재난 관련 데이터베이스를 구축했으나, 국제적 차원의 인도적 지원이 이뤄졌을 때 해당 국가의 노인들에 대한 지원여부와 범위 및 효과성에 대한 구체적이고 공식적인 데이터조차 확보하지 않았다. 이는 아동, 여성에 대한 데이터가 구호 프로젝트, 인구 분포 등에 따라 구체적으로 확인되고 있다는 것과는 상당히 대비된다. 노인에 대한 인도적 지원과 그 효과성은 헬프에이지의 ‘신속 필요 현황 파악 보고서’의 데이터를 활용했다. 결론적으로, 국가의 경제 발전 수준과 관계없이 자연재해가 발생했을 때 국제적 차원의 인도적 지원이 이뤄진다고 하더라도 노인은 건강, 생명, 나아가 권리를 제대로 보장받지 못하고 있다는 것을 확인했다.

본 논문은 센다이 프레임워크 도입 이후 자연재해 발생 상

황 및 이후 회복과정에서의 노인들의 지원 및 보호에 대해 분석한 소수의 연구라는 점에서 의의가 있다. 세계적인 고령화 추세에 대비하고 자연재해에 대비하기 위해, 나아가 본 논문은 전 세대에 적용되는 회복탄력성을 키우기 위해서 무엇보다도 노인을 인도적 지원 분야에서 가장 취약한 집단 중 하나로 인식해야 한다. 또한 효과적이면서 동시에 누구도 소외되지 않는 인도적 지원이 이뤄지기 위해 연령에 따른 데이터를 체계적으로 수집하고, 이를 재난위험관리에 활용할 수 있도록 해야 한다고 제안한다.

주요용어: 인도적 지원, 자연재해, 에티오피아, 인도네시아, 쉰다이

프레임워크, 노인

학번: 2017-24662

Dedicated to my beloved family